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BIMODAL POLYETHYLENE COMPOSITION AND ARTICLES MADE THEREFROM

ABSTRACT

[151] The invention relates to a polyethylene composition with a bimodal molecular weight distribution and articles made therefrom, such as high topload blow moldings and transmission and distribution pipes. The composition comprises a low-molecular-weight (LMW) ethylene homopolymer component and a homogeneous, high-molecular-weight (HMW) ethylene interpolymer component, wherein the LMW component is characterized as having a molecular weight distribution, MWD^L , of less than about 8. The composition is characterized as having a bimodal molecular weight distribution, and a ductile-brittle transition temperature, T_{db} , of less than -20°C. In some embodiments, the HMW component is characterized by a reverse comonomer distribution.

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